

In The Claims

1-19. (Cancelled)

20. (Currently Amended) A method of producing a crystalline substrate based device comprising:

providing a wafer comprising a semiconductor microstructure including a semiconductor substrate;

providing a spacer at a wafer level, said spacer defining at least one cavity extending entirely therethrough;

adhesively sealing to said wafer at least one transparent chip scale packaging layer and said spacer onto said semiconductor substrate over said microstructure and at least partially spaced therefrom, thereby to define at least one gap at said at least one cavity between said microstructure and said at least one chip scale packaging layer;

forming a multiplicity of electrical contacts along surfaces of said at least one packaging layer which define edges of individual chip scale packaged devices; and

subsequently dicing said wafer into said individual chip scale packaged devices,

wherein said spacer is formed as a piece separate from said substrate.

21. (Cancelled)

22. (Currently Amended) A method of producing a crystalline substrate based device according to claim 20 and wherein said adhesively sealing comprises using Epoxy to seal said at least one transparent chip scale packaging layer and said spacer onto said substrate.

23. (Original) A method of producing a crystalline substrate based device according to claim 20 and wherein said crystalline substrate comprises silicon.

24. (Original) A method of producing a crystalline substrate based device according to claim 20 and wherein said crystalline substrate comprises lithium niobate.

25. (Cancelled)

26. (Original) A method of producing a crystalline substrate based device according to claim 20 and wherein said at least one cavity comprises a plurality of cavities.

27. (Original) A method of producing a crystalline substrate based device according to claim 20 and wherein said microstructure comprises a micromechanical structure.

28. (Original) A method of producing a crystalline substrate based device according to claim 20 and wherein said microstructure comprises a microelectronic structure.

29. (Original) A method of producing a crystalline substrate based device according to claim 20 and wherein said microstructure comprises a optoelectronic structure.

30-32. (Cancelled)

33. (Original) A method of producing a crystalline substrate based device according to claim 20 and wherein said crystalline substrate comprises lithium tantalate.

34. (Original) A method of producing a crystalline substrate based device according to claim 20 and wherein said microstructure comprises a surface acoustic wave device.

35. (Cancelled)

36. (Original) A method of producing a crystalline substrate based device according to claim 20 and wherein said crystalline substrate comprises quartz.

37. (Cancelled)

38. (Currently Amended) A method of producing a crystalline substrate based device according to claim 20 and wherein said spacer is formed as a piece separate from said at least one chip scale packaging layer.

39. (New) A method for producing a crystalline substrate based device comprising:
forming a microstructure on a crystalline substrate; and
sealing at least one transparent chip scale packaging layer over said microstructure by means of an adhesive so as to define therewith at least one gap between said crystalline substrate and said at least one chip scale packaging layer, said substrate, said microstructure and said chip scale packaging layer forming a chip scale package,

wherein said microstructure receives light via said at least one transparent chip scale packaging layer.

40. (New) A method for producing a crystalline substrate based device according to claim 39 and wherein said at least one chip scale packaging layer is sealed onto said crystalline substrate using an adhesive.

41. (New) A method for producing a crystalline substrate based device according to claim 40 and wherein said adhesive comprises epoxy.

42. (New) A method for producing a crystalline substrate based device according to claim 39 and wherein said crystalline substrate comprises silicon.

43. (New) A method for producing a crystalline substrate based device according to claim 39 and wherein said at least one gap comprises a plurality of gaps.

44. (New) A method for producing a crystalline substrate based device according to claim 39 and wherein said microstructure comprises a micromechanical structure.

45. (New) A method for producing a crystalline substrate based device according to claim 39 and wherein said microstructure comprises a microelectronic structure.

46. (New) A method for producing a crystalline substrate based device according to claim 39 and wherein said microstructure comprises an optoelectronic structure.

47. (New) A method for producing a crystalline substrate based device according to claim 39 and wherein said crystalline substrate comprises lithium tantalate.

48. (New) A method for producing a crystalline substrate based device according to claim 39 and wherein said microstructure comprises a surface acoustic wave device.

49. (New) A method for producing a crystalline substrate based device according to claim 39 and wherein said crystalline substrate comprises quartz.

50. (New) A method for producing a crystalline substrate based device according to claim 39 and wherein said crystalline substrate comprises lithium niobate.

51. (New) A method according to claim 39 wherein the substrate, microstructure and packaging layer form a chip scale package having edge surfaces, the method also comprising plating a multiplicity of electrical contacts along said edge surfaces.

52. (New) A method for producing a chip scale packaged crystalline substrate comprising:

forming a microstructure on a substrate; and

sealing at least one chip scale package over said microstructure, defining therewith at least one gap,
and wherein said at least one package is at least partially transparent.

53. (New) A method for producing a chip scale packaged crystalline substrate according to claim 52 and wherein said at least one package is sealed onto said substrate using an adhesive.

54. (New) A method for producing a chip scale packaged crystalline substrate based device according to claim 53 and wherein said adhesive comprises epoxy.

55. (New) A method for producing a chip scale packaged crystalline substrate according to claim 52 and wherein said substrate comprises silicon.

56. (New) A method for producing a chip scale packaged crystalline substrate according to claim 52 and wherein said substrate comprises lithium niobate.

57. (New) A method for producing a chip scale packaged crystalline substrate according to claim 52 and wherein said substrate comprises lithium tantalate.

58. (New) A method for producing a chip scale packaged crystalline substrate according to claim 52 and wherein said substrate comprises quartz.

59. (New) A method for producing a chip scale packaged crystalline substrate according to claim 52 and wherein said at least one gap comprises a plurality of gaps.

60. (New) A method for producing a chip scale packaged crystalline substrate according to claim 52 and wherein said microstructure comprises a micromechanical structure.

61. (New) A method for producing a chip scale packaged crystalline substrate according to claim 52 and wherein said microstructure comprises a microelectronic structure.

62. (New) A method for producing a chip scale packaged crystalline substrate based device according to claim 52 and wherein said microstructure comprises an optoelectronic structure.

63. (New) A method for producing a chip scale packaged crystalline substrate based device according to claim 52 and wherein said microstructure comprises a surface acoustic wave device.

64. (New) A method for producing a chip scale packaged crystalline substrate based device comprising:

forming a microstructure on a crystalline substrate; and

providing at least one chip scale package including sealing at least one transparent packaging layer over said microstructure by means of an adhesive and defining therewith at least one gap between said crystalline substrate and said at least one packaging layer,

wherein said microstructure receives light via said at least one transparent packaging layer.

65. (New) A method for producing a crystalline substrate based device comprising:
forming a microstructure on a crystalline substrate; and
sealing at least one chip scale packaging layer over said microstructure and defining therewith at least one gap between said crystalline substrate and said at least one chip scale packaging layer, the crystalline substrate, microstructure and packaging layer forming a chip scale package,
the chip scale package having a multiplicity of electrical contacts plated along edge surfaces thereof.

66. (New) A method according to claim 65 wherein at least one gap is located over said crystalline substrate and under said at least one chip scale packaging layer.

67. (New) A method according to claim 65 wherein said chip scale packaging layer is sealed over said microstructure by means of an adhesive.